Community Development Department TEL. 510-747-6850 TTD. 510-522-7538

PLANNING PERMIT APPLICATION

Project Address: 2450 Mariner Square Loop Alameda, CA 94501		
Is the property subject to a Homeowners Association? □Yes ☒No Association Name:		
Please check all applicable permits.		
☐ Major Design Review ☐ Use Permit ☐ Winor Design Review ☐ Variance ☐ HAB Certificate of Approval ☐ Planned Development A☐ Sign Permit * ☐ Subdivision ☐ Second Unit Application* * Permit requires supplemental application.	☐ General Plan Amendment ☐ Rezoning Amendment* ☐ Other: ☐ Other:	
Please describe the application request. (Please attach additional sheets if necessary). Legacy Partners (building owner) and Sila Nanotechnologies (applicant and prospective future tenant) request a Use Permit to store and use silane gas indoors and outdoors and liquid nitrogen tower outdoors in conjunction with Sila's research and development efforts of battery technology at the above location. The gases will be stored in an existing gas and equipment storage pad at the site. The attached letter from Sila provides greater detail on our request, the building and property, information on silane gas use, and Sila Nanotechnologies' background. An additional letter is attached from Rene Ricks, an EH&S expert consultant, that answers questions about silane gas hazards.		
NOTE: Please read terms on reverse before proceeding.		
Property Owner(s): Legacy Partners I Alameda Loop, LLC		
Address: 2033 North Main Street, Suite 305	Phone (w): 925 945 3685	
City: Walnut Creek State: CA Zip: 94596		
Email: Connor Deal cdeal@legacypartners.com		
Applicant (if different than property owner): Sila Nanotechnologies Inc.		
Address: 541 10th St NW #195	Phone (w): 404-919-7452	
City: Atlanta State: GA Zip: 30318		
Email: Gene Berdichevsky gene@silanano.com	1	
Agent (if different than applicant):		
Address:	Phone (w):	
City: State: Zip:	Phone (h);	
To Be Completed By City Staff		
Case Planner/Date: Date Received:	APN:	
	Zoning:	
	GP:	
b) Receipt #:		

PROPERTY OWNER (Person(s) who own(s) the property).

I hereby certify under penalty of perjury, that I am the representative of the owner of record of the property described herein and that I consent to the action requested herein. Further, I hereby authorize City of Alameda employees and officers to enter upon the subject property, as necessary to inspect the premises and process this application.

Landlord:

LEGACY PARTNERS I ALAMEDA MARINER LOOP, LLC, a Delaware limited liability company

By: LEGACY PARTNERS COMMERCIAL, L.P., a California limited partnership,

as Property Manager and Agent for Owner

By: LEGACY PARTNERS COMMERCIAL, INC.,

General Partner

By:

Hanna Eyal

Its: Senior Vice President

DRE #0117881 BL DRE #01464134

[CONTINUED ON NEXT PAGE]

APPLICATION CERTIFICATION, AUTHORIZATION, AND AGREEMENT

PROPERTY OWNER (Person(s) who own(s) the property).

I hereby certify under penalty of perjury, that I am the owner of record of the property described herein and that I consent to the action requested herein. Further, I hereby authorize City of Alameda employees and officers to enter upon the subject property, as necessary to inspect the premises and process this application.

Property Owner's Signature X See Prior Page for Signature Date See Prior Page for Signature

APPLICANT (Person seeking the permit).

I hereby certify that I have read this application form and that to the best of my knowledge, the information in this application and all the exhibits are complete and correct. I understand that any misstatement or omission of the requested information or of any information subsequently requested may be grounds for rejecting the application, deeming the application incomplete, denying the application, suspending or revoking a permit issued on the basis of these or subsequent representations, or for the seeking of such other and further relief as may seem proper to the City of Alameda.

For applications subject to a time and materials charge, I hereby agree to pay the City of Alameda all incurred costs for staff time and materials associated with review and processing of the subject project even if the application is withdrawn or not approved. I understand that one or more deposits will be required to cover the cost noted herein at such time as required by the Planning Director to ensure there are adequate funds to cover anticipated time and materials costs. I expressly acknowledge and agree that failure to pay a written invoice for additional funds within 14 days of date of invoice shall constitute the applicant's withdrawal of the application.

Applicant's Signature X

Date

June 16, 2014

AGENT (Person representing the applicant in the permit process).

I hereby certify that I am the designated representative of the applicant during the permit process.

Agent's Signature X

Date

Please Note

- 1. If form is not completely filled out, application will be considered incomplete.
- 2. Fees are not refundable and payment in no way guarantees approval of application.
- Please make checks payable to the City of Alameda.



Use Permit Application Supplement

Land Use Information

Surrounding Land Uses:

Describe the existing building(s) and uses on the property:

What uses (residential, commercial, park, or manufacturing) exist on adjacent properties?

The facility is a single story, \sim 31,200 sq.ft, building intended for and will be used for office, R&D, and light manufacturing. The building has an attached \sim 50x25ft equipment and gas storage pad that will be used for the storage of silane and nitrogen and other equipment. There are no other buildings on this property

North: Commercial	East: Commercial
South: Commercial	West: Commercial
Use Characteristics	
	res a Use Permit: Please describe the project in terms of a scope of use, materials involved for the proposed use.
technicians and operators at this up to 75 over the next 3-5 years. hours, Mon-Fri. In 1-2 years Sila battery materials product in mode 10-20 employees. Sila will never	mber of employees including scientists, engineers, it's worldwide headquarters, from ~20 employees today. The company will primarily operate during business expects to begin a pilot operation to produce and sell its est quantities, which could require a second shift for run a large production operation at this facility.
Hours and Days of Operation:	Regular business hours Mon- Fri
	Number of Shifts 1 to 2 Employees per Shift up to 75
Customers Per Day: 1 or les	Trucks Per Day (indicate truck size): 1 or less
Specify the types and amounts of	of hazardous materials involved in the operation (incl.
toxics, flammables, or explosives	3):
appropriate cylinders (up to 32 standard	ressed silane gas (non-toxic, highly flammable, pyrophoric) stored in 5ft cylinders, or other gas cylinders) and up to 3,000 gallons of liquid single nitrogen tower. Both will be located inside the equipment/gas pad.
Describe any air pollutants or od No air pollutants or odo	ors from the operation:
Describe the source of any light No light or glare from th	or glare from the project:e project
Describe the noise, which will re No noise from the proje	sult from the project:ct
	trash/recyclable materials from the operation: recyclables beyond standard office operaitons

Sila Nanotechnologies' Letter Accompanying Conditional Use Permit

About Sila Nano

Sila Nanotechnologies Inc. develops and manufactures novel energy storage materials. Our first products are used in lithium-ion batteries to increase their energy storing capabilities and reduce battery costs. The technology can be applied to consumer devices like smartphones, laptops, and tablets (a \$10B battery market today) to extend their runtime and make them significantly smaller. The technology can also be applied to electric vehicles and plug-in hybrids like the Tesla Model S and the Chevy Volt (a \$3B battery market in 2013, expanding to \$20B+ in the next 4-5 years) to significantly drive down cost and improve driving range.

Sila was founded in September of 2011 by a pair of Silicon Valley entrepreneurs and battery engineers from Tesla Motors along with a professor of materials science from Georgia Tech. We formed in Atlanta, Georgia and have raised \$20M in venture financing over two rounds of funding. We've also added over \$5M in grants from the Department of Energy, the National Science Foundation, and undisclosed automotive partners. After recently closing its second round of financing, we plan to relocate our headquarters from Atlanta, GA to Alameda, CA.

In order to complete a building lease and locate the business in Alameda, Sila is requesting a Use Permit to store and use silane gas indoors and outdoors and store liquid/gaseous nitrogen outdoors. Both of these materials are critical to our research and operations. The outdoor storage will be within a pre-existing, attached equipment and gas storage pad.

About Sila's Operations

Sila Nano currently employees ~20 full time scientists, engineers, and technicians. We expect to grow in this facility over the next 3-5 years, potentially up to 75 employees. The company will typically operate during normal business hours. It is possible that after the pilot line is set-up in year 2, we will add a second shift to our operations. During our tenancy we expect no significant noise, odors, or traffic to arise from our operations.

About Silane Gas

Manufacturing our first product requires the use of a pyrophoric gas called silane (SiH₄). Silane is a gas typically used in solar cell and integrated circuit manufacturing. Silane is hazardous because it is flammable on contact with air in concentrations above 1.37%, so it must be stored, delivered, and used without the introduction of oxygen.

Sila has worked with silane for three years, and our management team has over 20 years of collective, incident-free experience with silane. Silane is safe when the proper procedures are followed and the tright hardware to handle it is installed. We will comply with all requirements, in accordance with the California Fire Code (CFC) for storage and use of flammable and pyrophoric gases, as well as the specific Compressed Gas Association (CGA) G-13 codes for use of silane.

Because silane is an essential source gas for depositing silicon, many companies in Silicon Valley have used it extensively over the decades as part of their manufacturing process. A partial list of these companies can be found further in this letter.

Silane is dangerous to users if not handled properly, but our research indicates that in over 130,000 hazardous materials accidents registered with the California Offfice of Emergency Services over the last 20 years, there have been only 10 recorded instances of silane gas incidents. Only two of these have resulted in injuries. The injuries that resulted (burns) were only to people working directly on the cylinders. The incidents also did not pose a risk to the environment, as only sand (SiO2) and water (H2O) are produced during the release reaction.

Sila's Silane Gas Use

We intend to store small quantities of silane indoors and larger quantities outdoors in an engineered, secured, enclosed equipment and gas storage pad. The indoor quantities will not exceed 100 cubic fee of compressed gas (about 3kg of silane) while the outdoor storage will not exceed 7,500 cubic feet (about 280kg of silane). Both amounts comply with CFC and CGA requirements.

We have put out requests for proposals to qualified engineering firms to manage the design and installation of the delivery systems. These firms include Air Liquide, Air Products, Linde, and IES Engineering. Collectively, these firms have installed hundreds of silane systems over the last several decades.

Additionally, we've retained Rene Ricks, an EH&S consultant with over 20 years of expertise, to help ensure that we comply with all requirements for safe use and storage of silane and take all appropriate precautions to ensure a safe working environment.

About the Outdoor Enclosure

We expect to store our silane within the existing outdoor equipment and gas pad currently attached to the building. The pad will need to be retrofitted to improve the quality and construction rating of the walls and doors. The pad is not expected to grow in height or size (currently \sim 25x50 ft in area and \sim 10 ft tall).

About Other Gasses and Equipment in the Pad

In addition to the silane storage, we expect to use the equipment pad to house other equipment, including an air compressor and potentially a small back-up generator. We also expect to install a nitrogen storage tank that may exceed the height of pad wall (but not higher than the adjacent building wall).

Expected Exterior Changes

We expect to upgrade the walls of the pad. As a result, sections currently made of chain link fence and wood may be replaced by solid wall – likely white. The current pad has partially white cinderblock walls, and partially dark chain-link fence with wood slats.

The liquid nitrogen tank that Sila plans to install will be 19ft tall, 7ft diameter, and white in color. It will be taller than the current pad walls, but shorter than the building.

Sila also expects to add minimal signage designating the business. The final signage plan is not done, but we expect to use minimally obtrusive signage on the entry doors to the building.

Examples of Other Companies with Silane Operations

Below is a partial list Sila has compiled showing the types of companies that use silane gas throughout the Bay Area. To the best of our knowledge, at least a third of these companies utilize silane in quantities similar to our proposed amounts, while several of them have production facilities that use much larger quantities, and several have more modest installed quantities.

- Stanford SNF/CIS Labs Research university (Stanford, CA)
- UC Berkeley Research university (Berkeley, CA)
- Sunpower Solar cell manufacturing (formerly Sunnyvale, now in San Jose)
- Applied Materials Advanced materials manufacturing (Santa Clara)
- Intel Microelectronics manufacturing (Santa Clara)
- Maxim Integrated Microelectronics manufacturing (San Jose)
- Western Digital Hard disks (Hayward)
- Solexel Solar cell manufacturing (Milpitas)
- Optisolar Solar cell manufacturing (R&D, pilot in Hayward. Mass production in Sacramento)
- Hanwha Solar One Solar cell manufacturing (Santa Clara)
- Skyworks Microelectronics manufacturing (Santa Clara)
- Calisolar Solar cell manufacturing (Sunnyvale)
- Amprius Battery materials (Sunnyvale)
- Linear Technology Microelectronics manufacturing (Milpitas)
- IXYS Microelectronics manufacturing (Milpitas)
- ST Microelectronics Microchip manufacturing (Santa Clara)
- LAM Research Wafer fab equipment and services (San Jose)

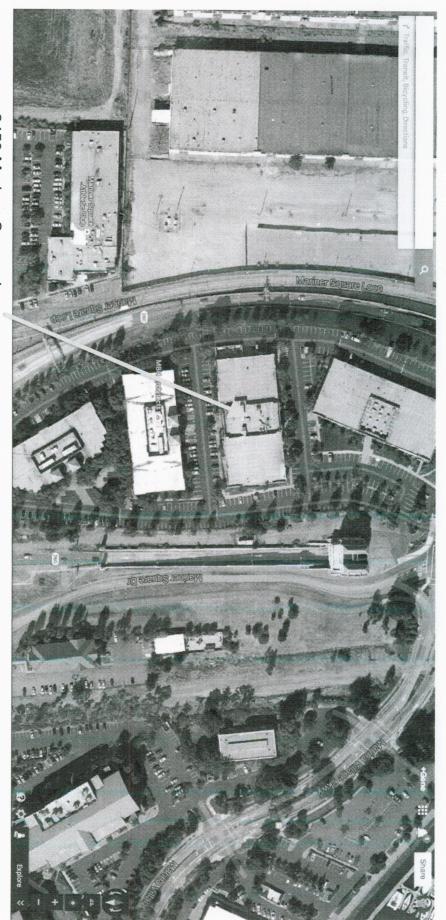
We hope this information is helpful. Pease don't hesitate to contact me with any questions.

Sincerely

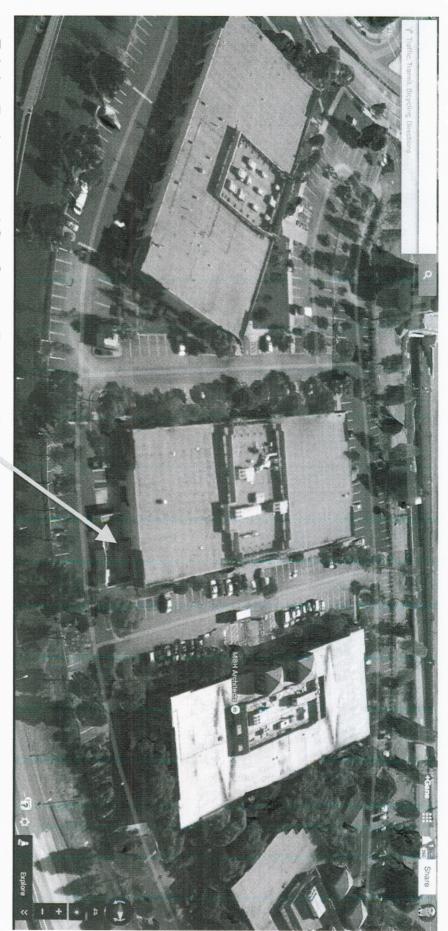
Gene Berdichevsky

CEO, Sila Nanotechnologies

gene@silanano.com



2450 Mariner Square Loop



Existing Equipment and Gas Storage Enclosure/Pad

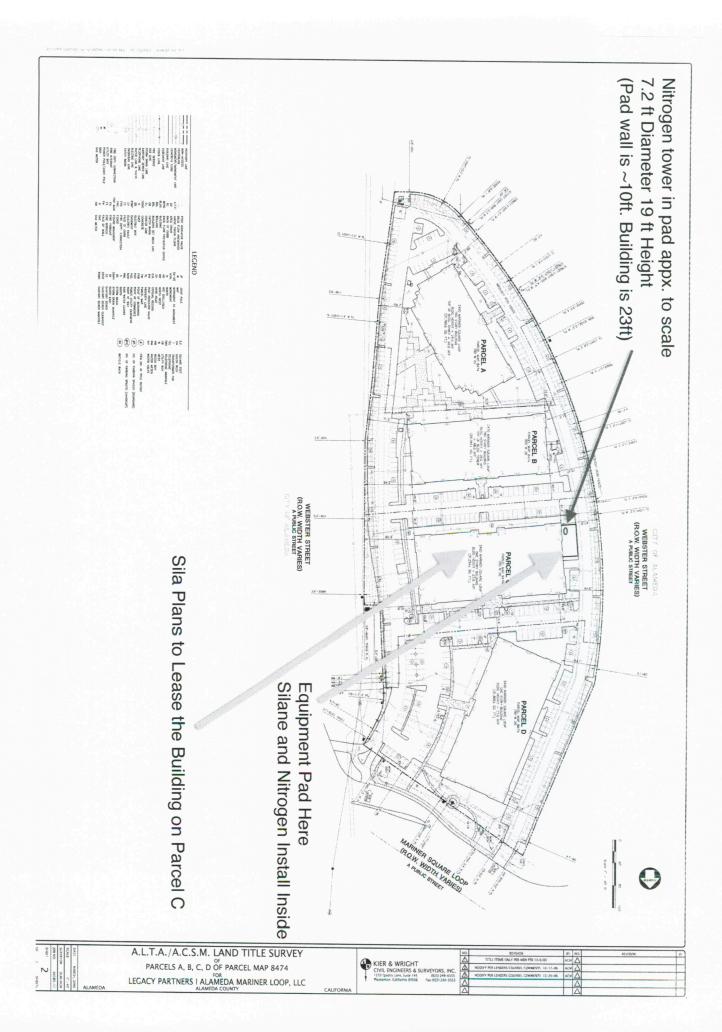
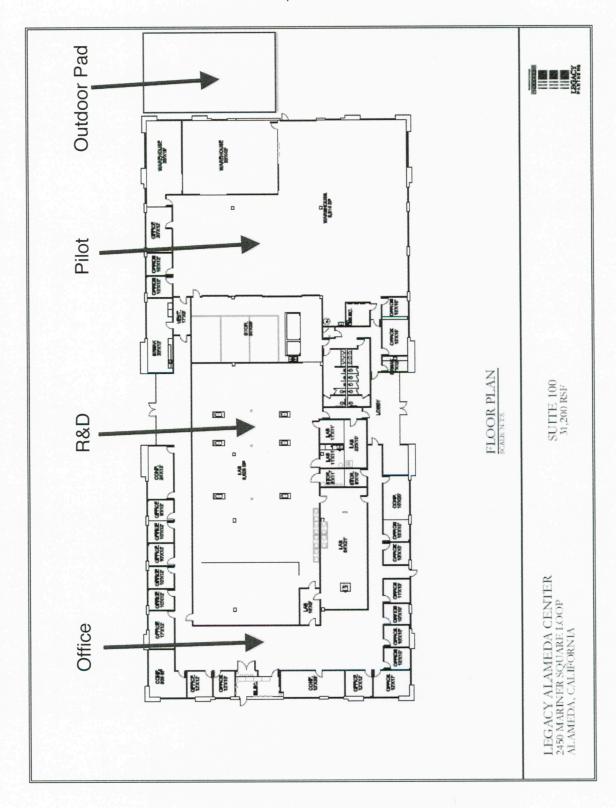
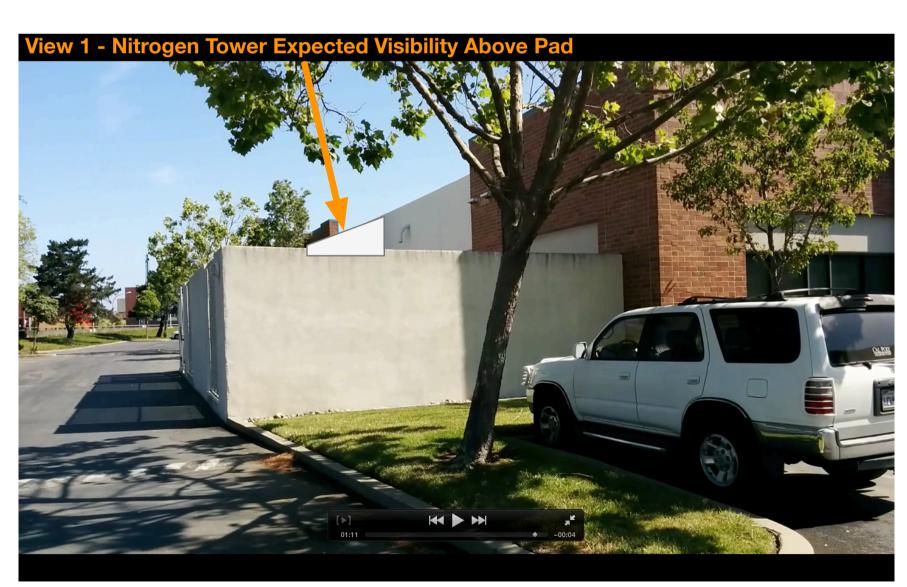


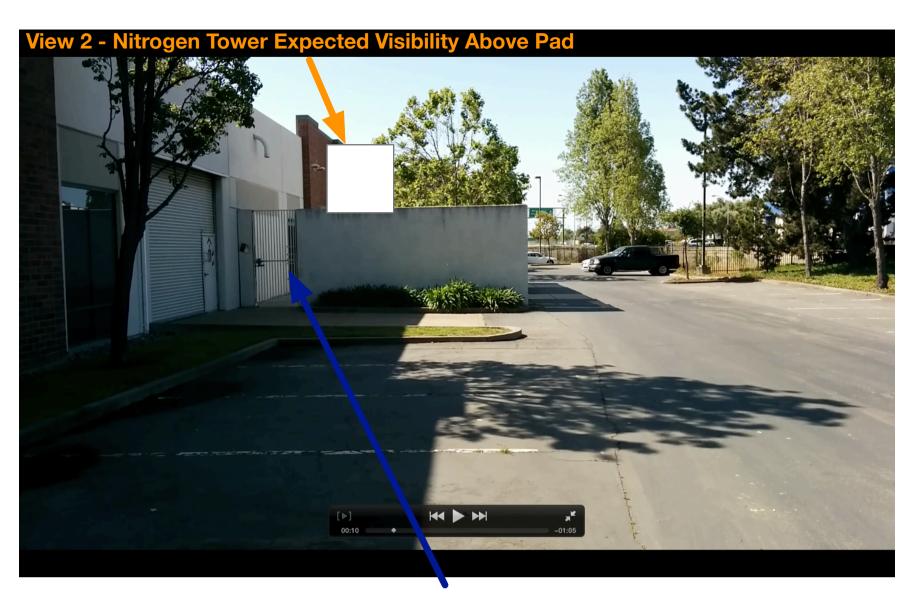


Exhibit A Space Plan









Walls expected to be improved, non-cinder block sections replaced with cinder block Doors may be replaced with solid steel doors. One additional door may be added.



Tower will be 19ft tall. The pad is 10ft tall. The white cinder block portion of the building is 20ft tall. The brick portion of the building is 23ft tall.

